

Work Order ID 61447

Wednesday, August 25, 2010 10:33:04 AM



Page 1

Item ID: D206-667-203TRN

Accept



Setup Start



Revision ID:

Item Name: Crosstube Turning Detail

Stop



Start Date: 8/25/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 9/1/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date: 10-8-25 Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr	Revision Nbr								
D206-667-243	Rev C								

100



MORI SEIKI CNC LATHE LARGE

0.00

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

1-Fill tube with sand & install plugs DT8534 on both ends as per Folio FA089
 2-Turn first side as per Folio FA089
 3-File down transition lines smooth.

110



QC1- Inspect dimensions to dimension sheet

0.00

QC

Memo

0.00

Quality Control

120



MORI SEIKI CNC LATHE LARGE

0.00

Mori Seiki

Memo

0.00

Mori Seiki CNC Lathe Large

1-Turn second side as per Folio FA089
 2-File down transition lines smooth.

 3-Remove sand and plugs
 4-Scrib part# and batch #

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Approvals: Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run

Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center ID

130



QC

Quality Control

Operation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

QC1- Inspect dimensions to dimension sheet

0.00

8/25/2010/08/29

1 0

140



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

1X 0 MB 10-08-30

150



HandFXtube

Hand Finishing Crosstubes

Crosstubes Chemical Conversion

0.00

Memo

0.00

DP 10-08-30

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Accept



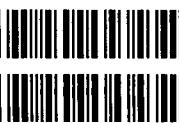
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Stop



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Cust Item ID:

Required Date: 9/1/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center ID

160



QC

Quality Control

Operation
Description

QC3- Inspect Part Finish

Set Up/
Run Hours

0.00

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170



Packaging

Packaging

Packaging

Memo

0.00

MB 10-08-30

180



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

10/08/30 D

PS 10-08-30
D

W/O:		WORK ORDER CHANGES					
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Picklist Print

Wednesday, August 25, 2010 10:33:09 AM

Page 1

Work Order ID: 61447



Parent Item: D206-667-203TRN



Parent Item Name: Crosstube Turning Detail

Start Date: 8/25/2010

Required Date: 9/1/2010

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 08-03-06 new issue DD verified by:ec
IPP Rev B 08.04.02 Removed polish EC verified by: DD
IPP Rev C 09.01.06 ECN 08-562 EC verified by:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6004-115 		Manufactured	No			100	Each	62.0000	1	1			

Crosstube Material

Location	Loc Qty	Loc Code
LG	62	
34685	17	
34774	9	
38336	36	

1 25/08/2010

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	61447
Description: Crosstube Assembly	Part Number:	D206-667-243
Inspection Dwg: D206-667-243 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

Inspection Sheet Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
SIDE A	2.490	+0.005/-0.000	2.490	—	Vern	ML-7
	2.018	+0.005/-0.000	2.019	—	"	"
	2.079	+0.005/-0.000	2.083	—	"	"
	2.145	+0.005/-0.000	2.150	—	"	"
	2.209	+0.005/-0.000	2.214	—	"	"
	2.287	+0.005/-0.000	2.292	—	"	"
	2.363	+0.005/-0.000	2.367	—	"	"
	2.433	+0.005/-0.000	2.438	—	"	"
	0.200	+/-0.010	.200	—	"	"
	0.500 x 30°	+/-0.010	.500x30°	—	"	"
	R0.063	+/-0.010	R.063	—	R-G	N/A
	R0.500	+/-0.010	R.500	—	"	"
	4.438	+/-0.030	4.430	—	Vern	ML-7
	104.91	+/-0.020	104.930	—	M-tape	ML-2
	2.490	+0.005/-0.000	2.490	—	Vern	ML-7
SIDE B	2.018	+0.005/-0.000	2.019	—	"	"
	2.079	+0.005/-0.000	2.083	—	"	"
	2.145	+0.005/-0.000	2.150	—	"	"
	2.209	+0.005/-0.000	2.214	—	"	"
	2.287	+0.005/-0.000	2.292	—	"	"
	2.363	+0.005/-0.000	2.368	—	"	"
	2.433	+0.005/-0.000	2.438	—	"	"
	0.200	+/-0.010	.200	—	"	"
	0.500 x 30°	+/-0.010	.500x30°	—	"	"
	R0.063	+/-0.010	R.063	—	R-G	N/A
	R0.500	+/-0.010	R.500	—	R-G	N/A
	4.438	+/-0.030	4.438	—	Vern	ML-7
	104.91	+/-0.020	104.930	—	M-tape	ML-2
	2.490	+0.005/-0.000	2.490	—	Vern	ML-7

Measured by:	Onf	Audited by:	AB	Prototype Approval:	N/A
Date:	10/08/29	Date:	10-08-30	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.09.01	New Issue	(P/O D206-667-203)	KJ/JLM JF Jd

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Item	Qty	Part Number	Description
1	X	D206-667-243	CROSSTUBE ASSEMBLY (206L HIGH AFT)
2	1	D6004-115	CROSSTUBE
3	2	D2873-043	NUT PLATE
4	2	D2873-045	NUT PLATE
5	2	D2892-1	SUPPORT
6	4	D3595-063-450	RUBBER CUSHION
7	4	MS21920-22	CLAMP
8	14	MS20601AD4W10	RIVET (OR NAS9302B-4-10)
9	A/R	MAGNOBOND 6398	ROCKWELL SPECIFICATION RBO-120-023 ADHESIVE (TEXTRON/BELL SPEC. 299-947-100, TYPE II, CLASS 2 ADHESIVE)

GENERAL NOTES:

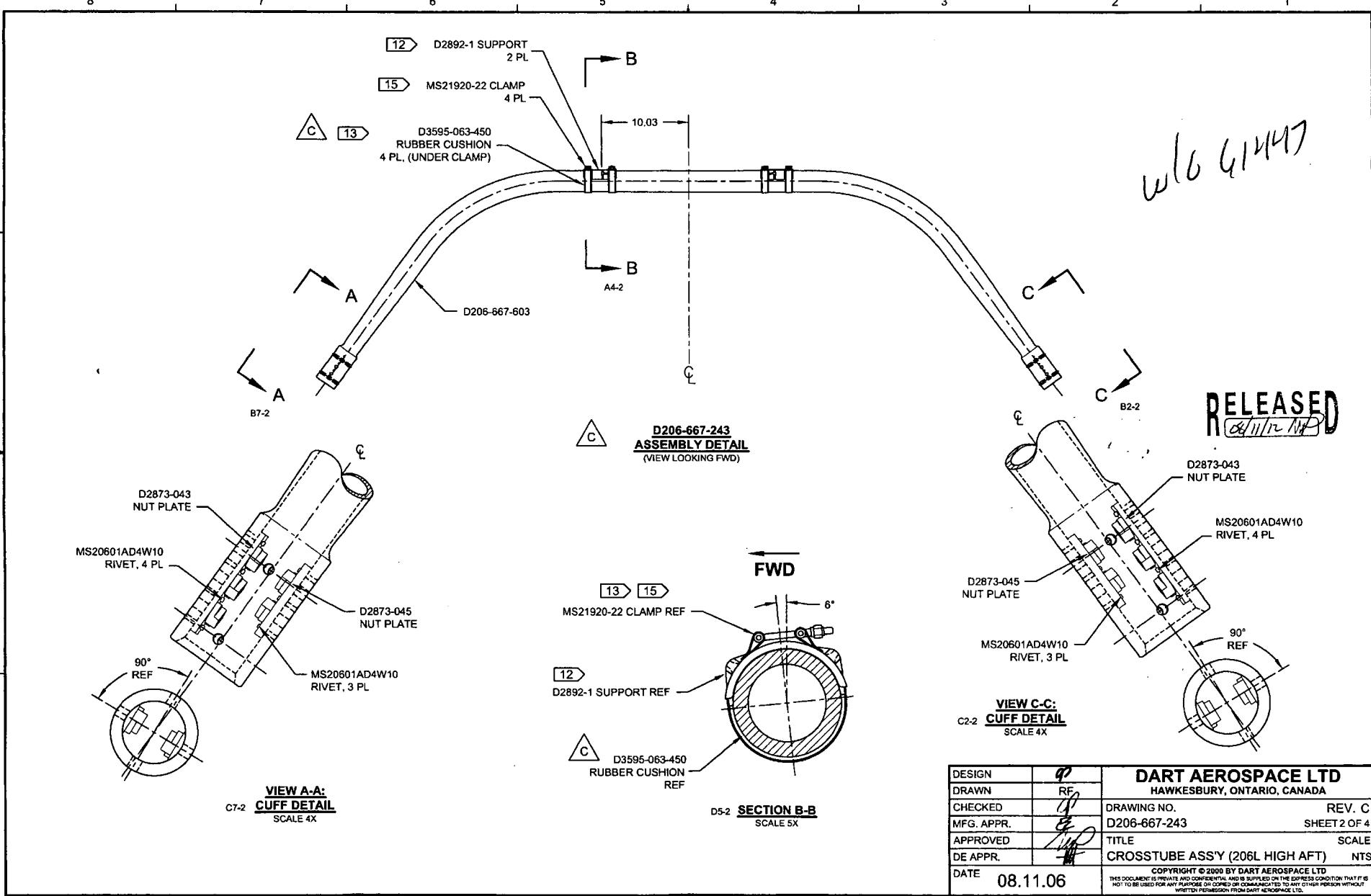
- 1) MATERIAL: MANUFACTURED FROM D6004-115
FINISHED LENGTH = 104.91±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT OUTSIDE PER DART QSI 005 4.2
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- 6) IDENTIFICATION: SCRIBE DART PART NUMBER "D206-667-243" AND BATCH NUMBER ON INSIDE OF CUFF USING VIBRATING STYLUS.
- 7) WEIGHT: 21.9 lbs
- 8) PART IS SYMMETRIC ABOUT CENTERLINE.
- 9) RUN CUTTER OFF PART WHERE INDICATED. BLEND OUT EDGE LONGITUDINALLY.
TRANSITION SHOULD BE SMOOTH.
- 10) BEND PROGRESSIVELY WITH A MINIMUM OF 8 PASSES. MAXIMUM TUBE FLATTENING DUE TO BENDING IS 6% BASED ON O.D.
- 11) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 038.
- 12) INSTALL D2892-1 SUPPORT USING 0.03" TO 0.06" THICK LAYER OF MAGNOBOND 6398 PER QSI 015. LET CURE FOR 12 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 13) INSTALL MS21920-22 CLAMPS WITH D3595-063-450 RUBBER CUSHIONS TO SECURE THE D2892-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMP MECHANISMS ARE LOCATED ON CROSSTUBE SUPPORTS.
- 14) EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 15) TORQUE CLAMPS 80 TO 100 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. *614417*

PP10-8-25

RELEASED
(8/11/rm)

C	REVISE GENERAL NOTES/PART LIST (ZN D7-1); REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENT STANDARDS. D3595-063-450 WAS D2856-400-773 (ZN D6-2 & A5-2); REMOVED REF. & ADD TOLERANCES (ZN 4-3, C5-3, D3-3); RELOCATED FLAG #6 (ZN A8-3) PER NCR 210; MOVED TURNING DETAIL & UPDATED TOLERANCE TO SHEET 4.	RF	08.11.06
B	ADD HOLES AND NUT PLATES FOR COMPATABILITY WITH BH71A SKUTUBES	PH	05.07.26
A	NEW ISSUE	CP	00.11.17
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>9</i>	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>10</i>	DRAWING NO.	REV. C
MFG. APPR.	<i>E</i>	D206-667-243	SHEET 1 OF 4
APPROVED	<i>MM</i>	TITLE	SCALE
DE APPR.	<i>MM</i>	CROSSTUBE ASSY (206L HIGH AFT)	NTS
DATE	08.11.06	COPYRIGHT © 2000 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	



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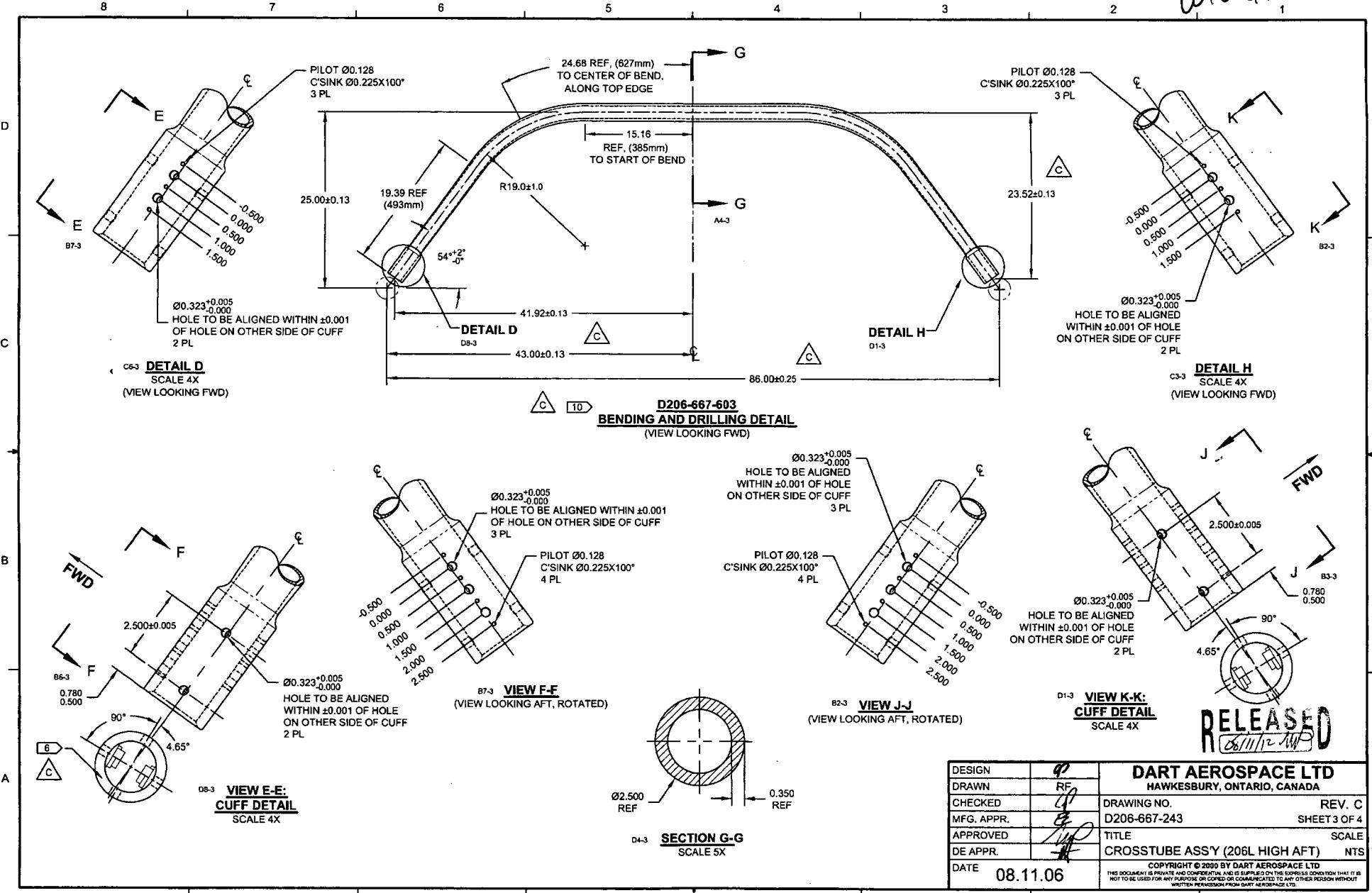
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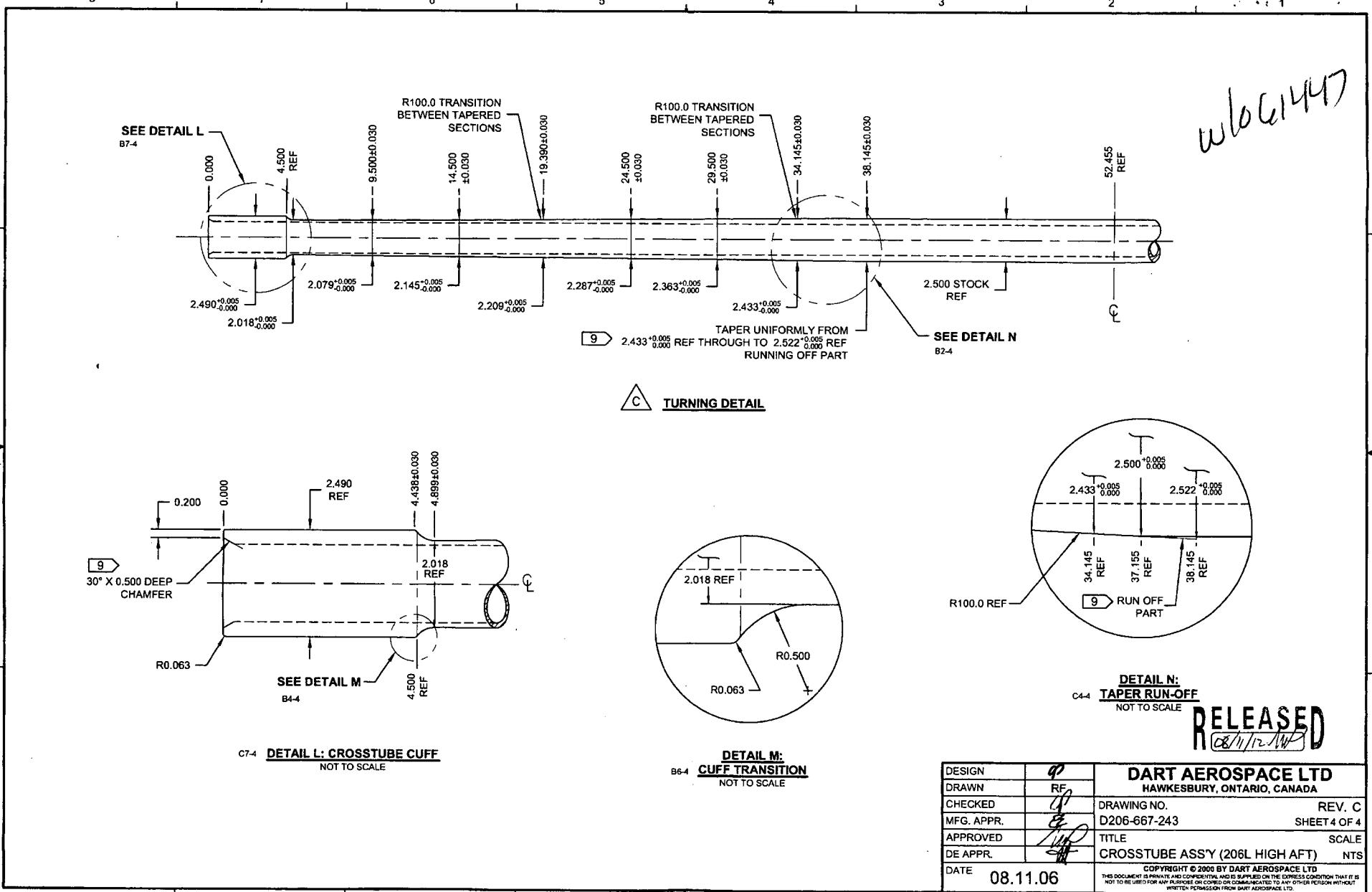
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